

GSV-4BT M12



Highlights

- IP67 housing with integrated battery
- Long Distance Bluetooth interface
- 4 channels
- Inputs for DMS / 0 - 5 V / PT1000
- Measuring ranges 2 mV / V / 10 mV / V
- DMS quarter- / half-full bridges
- 4 digital inputs / outputs
- Data rate 0 Hz - 900 Hz



Description

The measuring amplifier GSV-4BT M12 is an amplifier with 4 independent channels for sensors with strain gauges, such as Force sensors, torque sensors, accelerometers or strain sensors.

Data rates from 0.6Hz up to 900Hz are possible;

The power consumption is less than 150mA. At rest, the power consumption is less than 10mA.

It is powered via e.g. a lithium polymer battery.

The housing has IP67 protection. The sensors are connected via M12 circular connectors.

Technical Data

Basis Data

Housing	Grouting
Connection	Connector
Number of channels	4-Kanal

Input analog

Number of analog inputs	4
Input sensitivity-steps	2.0 10 mV/V
Input resistance strain-gauge-full-/half-bridge	89 ... 5000 Ohm
Input resistance strain-gauge-quarter-bridge	120 350 1000 Ohm
Input voltage to	10 V
Input resistance-voltage	10 kOhm

Precision

Accuracy class	0,05%
Relative linearity error	0.02 %FS
Temperature effect on the zero point	0.05 %FS/10°C
Temperature effect on the measuring sensitivity	0.01 %RD/10°C
Resolution	16 Bit

Supply

Supply voltage f	3.3 ... 4.2 V
Current consumption from	100 mA
Strain gauge bridge supply	2.5 V

Interface

Type of the interface	bluetooth
Quantity of the interface	1
Version of the interface	Standard 2.0+EDR

Zero adjustment

Type	digital software
Tolerance	0.01 %
Time period	1 ms
Debouncing time	4 ms
Trigger level f	3.4 ... 4.2 V
Trigger edge	Level




Temperature

Rated temperature range f	-10 ... 65 °C
Operating temperature range f	-40 ... 85 °C
Environmental protection	IP65



Measuring frequency	
Data frequency to	500 Hz
Sampling frequency	1.92 MHz
Limit frequency (analog)	450 Hz

accessories

	Description	Description
	Bluetooth USB-Dongle UD100	Bluetooth USB-Dongle for extended range
	Charger M8	2m Connecting cable 4x0,25/PVC, with M8-round plug (female), 4-pole, Series 718
	Charger Ultramat 14 plus	Charging sockets 4mm, Power supply 230VAC or 12V DC, 1-14 NiMh cells, 1-5 Li-ion cells, 1-5 Li-Po cells, 1-6 Pb cells, charging current 0.1A-5A, Trickle Charge, Dimensions : 148mm x 146mm x 54mm
	Connector xp/m/M12/0	Cable plug connector, 4 / 5 poles, shieldable



Orderoptions

Type	Description
GSV-4BT	
Li-Ion 1S/1P/2.6Ah	
Adapter-GSV-4BT	
Adapter-GSV-4BT MSTB	
Bluetooth-USB-Adapter	
GSV-4BT M12	
GSV-4BT LD	
Bluetooth USB-Dongle UD100	